

although the puncture from which they spring is clearly visible on each side. I cannot satisfy myself that there is any setigerous puncture inside of the hind angles and believe that the basal bristle is absent in this species.

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## DESCRIPTIONS OF NEW NORTH AMERICAN PTINIDAE, WITH NOTES ON AN INTRODUCED JAPANESE SPECIES.

By W. S. FISHER, U. S. Bureau of Entomology.

In arranging the material which has accumulated during the past two years in the family Ptinidae in the National Museum Collection, the following new species were found. The types of all these new species are deposited in the United States National Museum.

### *Ptinus mitchelli*, new species.

*Female*.—Moderately elongate, nearly parallel, brown with the median part of the elytra only slightly darker. Antennae with second joint subquadrate, about one-half the length of the third; joints 3 to 9 subequal in length and about two and one-half times as long as wide, each slightly increasing in width from base to apex (joints 10 and 11 broken off). Eyes moderately prominent, separated on the front by about two times their vertical diameter and about equal in width to the combined length of the second and third joints of the antennae. Head densely, finely granulate and pilose. Prothorax coarsely granulate and hirsute, the hairs yellowish, with a distinct longitudinal series of whitish hairs on each side of the middle, extending from the basal constriction to near the frontal margin, and with a transverse series of whitish hairs in the constriction which are separated at the middle. Elytra at base nearly twice as wide as the prothorax and fully three times as long; humeri prominent; sides nearly parallel, slightly wider at apical third; surface moderately strongly punctate-striate, the intervals a little wider than the punctures, each with a series of brownish or yellowish suberect hairs which vary somewhat in length, the longest nearly equaling the distance from the suture to the third stria; setae of the stria punctures somewhat shorter and more inclined; at base and apical fourth a conspicuous fascia of white recumbent, squamiform hairs; the anterior oblique fascia reaching from near the humeral angle to third stria; the posterior transverse fascia reaching from near the lateral margin to the third stria, and also a short subsutural spot of similar hairs behind the middle on the third interval. Scutellum densely clothed with whitish recumbent hairs. Metasternum and abdomen densely clothed with fine whitish recumbent hairs; the former as long as the second and third ventral segments united. Fourth ventral segment fully two-thirds as long as the third and

only slightly shorter than the fifth. Legs slender, first tarsal joint subequal to the two following joints united.

Length 3 mm.; width 1.3 mm.

*Habitat*.—"Brewster County, Texas; Rio Grande." Described from a single female specimen collected by "Mitchell and Cushman," June 13-17, 1908, on "*Prosopis grandulosa*."

*Type*.—Cat. No. 22387, U. S. Nat. Mus.

This species is closely allied to *paulonotatus* Pic, but the elytra are darker, especially on the median parts, the markings on the thorax and elytra are more conspicuous, the abdomen more densely pubescent and the hairs on the elytra longer. This species might be placed in the group near *bimaculatus* but the dark and light markings of the elytra are not so distinctly separated, only becoming gradually a little darker on the lateral median part, so it is best placed with the species having the elytra nearly uniform in color.

***Ptinus barberi*, new species.**

*Male*.—Moderately elongate, parallel, uniformly reddish brown throughout. Antennae four-fifths as long as the entire length of the body; second joint subquadrate, about one-half the length of the third; joints 3 to 10 subequal in length, about two times as long as wide, each rapidly increasing in width from base to apex; eleventh joint one-fifth longer than the tenth, cylindrical with the apex pointed. Eyes very large and prominent; front of head a little narrower than their vertical diameter. Head densely, finely granulate and pilose. Prothorax rather coarsely granulate, hirsute, the hairs varying in color from brown to luteous; disk not prominent at middle before the constriction. Elytra at base two times as wide as the prothorax and fully three times as long; humeri prominent; sides parallel; strial punctures rather fine; interspaces fully twice as wide as the stria, each with a row of suberect hairs varying but little in length, the longest about equaling the distance from the suture to the second stria; setae of the strial punctures shorter and more inclined; the surface is also clothed with irregular patches of recumbent yellowish, squamiform hairs, giving it a motley appearance. Scutellum densely clothed with very fine inconspicuous cinereous pubescence. Metasternum and abdomen densely clothed with fine recumbent cinereous hairs intermixed with longer erect ones of the same color, the former scarcely as long as the second and third ventral segments united; fourth ventral segment fully two-thirds as long as the third and a little shorter than the fifth; fifth without apical tubercle. Legs slender; first tarsal joint subequal to the two following joints united.

Length 2.5 mm.; width 1 mm.

*Habitat*.—Brownsville, Texas. Described from a single male specimen collected by H. S. Barber, May 18, 1904.

*Type*.—Cat. No. 22386, U. S. Nat. Mus.

In the general uniform color this species resembles *paulonotatus* Pic, but the squamiform hairs on the elytra instead of forming transverse fascia, are irregularly placed, giving it a motley appearance; the interspaces of the elytra being fully twice as wide as the striae punctures, and the suberect hairs of the elytra not quite as long as in that species.

I take pleasure in naming this after Mr. Herbert S. Barber.

***Neohedobia*, new genus.**

Mentum triangular, labrum very short and transverse, palpi short, basal joint smallest, not curved; second and third joints obconic and a little elongate; terminal joint longer, widest at about the middle, the apex pointed. Antennae inserted at the sides of the front before the eyes, filiform (not compressed); basal joint oval, stout, a little longer than wide; second, third and fourth joints subequal in length, moniliform; joints 5 to 10 subequal in length, scarcely triangular, a little longer than wide; eleventh joint distinctly longer than the tenth, oval and pointed at the apex. Head deflexed; eyes globose, prominent but not large; front not margined over the base of the antennae. Prothorax narrower than the elytra, not margined at sides nor excavated beneath. Elytra parallel, seriate-punctate. Prosternum without intercoxal process; mesosternum short, the coxae narrowly separated; metasternum as long as the two ventral segments; hind coxae not sulcate, moderately separated, the intercoxal process broadly rounded. Ventral segments 1 to 4 nearly subequal in length, the third and fourth just visibly shorter; fifth segment two times as long as the fourth with a shallow depression near the apex. Legs rather short and stout; femora not elavate; tibiae longer than tarsi, the former straight, nearly parallel, with one small spur; the latter narrow, slightly pubescent beneath, first joint equal in length to the three following joints united; third and fourth joints short, the fourth distinctly transverse, not emarginate; last joint oblong; claws strongly divaricate.

*Genotype*.—*Neohedobia texana* Fisher.

This genus is closely allied to *Hedobia* but differs from it by having the third and fourth antennal joints moniliform, not subtriangular nor compressed; tarsi not as long as the tibiae; tarsal joints less broad and scarcely pubescent; also by having the elytra seriate-punctate. From *Eucrada* it differs by having the antennae filiform and not pectinate or strongly serrate as in that genus.

***Neohedobia texana*, new species.**

*Male*.—Oblong, moderately elongate, piceous, antennae and tarsi piceo-testaceous. Antennae rather short, a little more than half the length of the body; the tenth joint one-fifth longer than wide. Head rather densely

granulate, sparsely clothed with short recumbent cinereous hairs; front nearly three times as wide as the vertical diameter of the eyes. Prothorax one-sixth wider than long, slightly constricted behind the apex, wider posteriorly, where it is nearly equal in width to the elytra at the base; front angles nearly right; hind angles rounded; disk obtusely elevated at middle; surface densely granulate and sparsely clothed with short recumbent cinereous hairs. Elytra only slightly wider than prothorax, seven-tenths as wide as long, parallel to posterior fourth then broadly rounded; margin finely serrulate posteriorly; surface closely, coarsely striate-punctate, sparsely clothed with short recumbent cinereous hairs. Scutellum triangular rather densely clothed with recumbent cinereous hairs; apex broadly rounded. Beneath shining, rather densely, finely punctate, sparsely pubescent; fifth ventral segment truncate at apex, with a shallow round apical fovea. Tibiae serrate along the exterior margin, the outer apical angles not prominent.

Length 3 mm.; width 1.75 mm.

*Habitat*.—Dallas, Texas. Described from a single male specimen collected April 5, 1912, by W. D. Pierce on "*Phoradendron*."

*Type*.—Cat. No. 22388, U. S. Nat. Mus.

*Trichodesma pratti*, new species.

Oblong, moderately robust, more than two times as long as wide. Antennal club subequal in length to all the preceding joints united; the intermediate joints all a little longer than wide. Prothorax very nearly equal in width to the elytra; sides a little arcuate and converging posteriorly; hind angles rounded; disk strongly gibbose; surface rather densely granulate (each granule bearing a long, fine, erect hair); densely clothed with recumbent cinereous hairs, becoming fulvous towards the gibbosity, except at the posterior median part; summit of the gibbosity with four oblong tufts of erect brown hairs. Elytra with coarse punctures arranged in irregular rows these are nearly obscured by the numerous small rounded granules, which are more abundant at the base and apex; vestiture consisting of dense recumbent cinereous hairs intermixed throughout with long, fine, erect hairs. The whitish recumbent hairs form a broad irregular transverse band just behind the middle, the pubescence becoming sparser towards the lateral edge. Within the dark basal area there are on each elytron two elongate tufts of dark brown hairs, one sutural and the other parallel to and exterior to the first; also an elongate tuft of fulvous hairs on the humerus. At the posterior fourth there are on each elytron a transversely arcuate series of four elongate tufts of dark brown hairs and small irregularly placed patches of cinereous hairs. Beneath rather densely clothed with recumbent cinereous hairs and rather closely granulate, except the first three ventral segments of the abdomen which are simply punctate on the median portions. Legs densely pubescent, the tibiae and femora with numerous long, erect hairs.

Length 6-7 mm.; width 2.5-3 mm.

*Habitat*.—Kerrville, Texas. Described from four specimens

(sex undeterminable), collected June 19, 1907, and April 22, 1908, by F. C. Pratt.

*Type*.—Cat. No. 22385, U. S. Nat. Mus.

This species is very closely allied to *T. gibbosa* Say, but is distinguished from that species by having the whitish recumbent hairs on the elytra forming a more transverse band and not extending obliquely to the humeral angles, nor forming a dark semi-circular area back of the scutellum which contrasts strongly with the adjacent densely clothed portions. The four tufts of dark brown hairs on the prothorax are of equal size while in *gibbosa* the anterior pair is quite small.

#### *Ptilineurus marmoratus* Reitter.

In working over the material a series of specimens were found labelled "*Hedobia* sp." which are the above Japanese species. Fall referred to this series of specimens in his "Revision of the Ptinidae of Boreal America" (1905, Trans. Amer. Ent. Soc. XXXI, p. 129), as belonging to the tribe Hedobiini and having been reared from Japanese bamboo, but in looking up the original notes in the Bureau of Entomology files, it was found that they were infesting the wood of different species of trees and not bamboo as mentioned by Fall. The following unpublished notes in the Bureau of Entomology files were made by E. A. Schwarz, July 24, 1883: "I found that the Japanese representation of the trees exhibited in the National Museum were badly infested by a Ptinid beetle. These representations of trees consist of a plate of wood upon which the leaves, blossoms and fruit are painted and which is surrounded by a framework composed of the wood of the same tree itself showing at the corners cross sections of the twigs and on the sides longitudinal sections, but the insects had in many instances also attacked the cross sections, boring into the wood itself. In most cases they burrowed under the bark. Only a few living specimens of the beetles were seen as the cases are not tight enough to prevent their escape and a close investigation of the frames was impossible without destroying their scientific value. Larvae were found which do not differ in shape from other Ptinid larvae. Upon lifting up smaller pieces of the bark it was found that the larvae spin a cocoon of fine, white silk, which is fastened in a kind of a shallow cell in the under side of the bark, the cocoons greatly resembling in appearance that of a *Microgaster*, being only a little less cylindrical and wider at the middle. *Anthrenus* larvae were feeding upon the cocoons and the dead adults. The species appears to have invaded most of the frames without regard to the species



of trees. The origin of the beetle is uncertain but it comes presumably from Japan, at any rate there is nothing similar known from the United States and the aspect of the species is that of a Palearctic species."

A single specimen of this species was also collected by Mr. F. C. Pratt at St. Elmo, Virginia, a few miles below Washington.

This species was first described by Reitter (1877, *Deutsche Ent. Zeitschr.* XXI, p. 379) from Japan and placed in the genus *Ptilinus*, probably on account of the shape of the antennae. In 1879 (*Deutsche Ent. Zeitschr.* XXIII, p. 317) Kiesenwetter described the same species from Japan as *Ptilinus ramicornis*. Reitter (1901, *Best.-Tab.* XLVII, p. 24) erected the genus *Ptilineurus* for *marmoratus* Reitt. and placed *Ptilinus ramicornis* Kiesw. as a synonym of it, but still retained the genus in the group with *Ptilinus*.

This species is not closely related to *Ptilinus*, but in habits and structural characters it should be placed in a new tribe near Hedobiini, the margined thorax and exposed vertical pygidium will not allow it to be placed in that tribe. The species superficially resembles *Hedobia granosa* Lec., but the exposed vertical pygidium will at once distinguish it from any other known American Ptinid.

#### NOTES ON THE SEASONAL ACTIVITY OF TABANIDAE IN THE LOWER EVERGLADES OF FLORIDA.

BY C. A. MOSIER, *Warden, Royal Palm State Park, Dade Co., Fla.*, AND  
T. E. SNYDER, *Bureau of Entomology.*

Since 1916, notes on the seasonal activity of Tabanids in southern Florida have been recorded in these Proceedings, especially the flight of *Tabanus americanus* in large numbers at dawn. Apparently, species of *Tabanus* are active during every month of the year; this, however, includes belated "stragglers" or specimens that emerge very early.

At Paradise Key, in the Lower Everglades, *Tabanus lineola* was overabundant on the prairies and common in the hammock during late July and early August. On the prairie these flies were especially common where the land has been farmed and is now covered with a heavy growth of weeds and grass—some ten feet high. Further into the natural prairie where less or no farming had been done, they diminished in numbers until near the seashore there were none.

On August 30, 1918, Mosier noted that all the saw palmettoes (*Serenoa*) from which the leaves had been cut in April and on